

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites:

"the bending oven" in line 6

"the period corresponding to sintering under the action of increased temperature"

In lines 7-8

"the bending operation" in line 10.

There is insufficient antecedent basis for these limitations in the claim.

Further, Claim 1 line 5 recites the limitation of "the faces of the sheets in contact with one another", however the claim fails to make clear at which point said sheets are in contact (e.g. in storage, during bending, after lamination).

Claim 1, line 9 recites the limitation wherein "these are put back on directly on top of the other" however, the claim fails to clearly delineate what element or elements are intended as the antecedent for the term "these".

Claim 12 recites the limitation “the profile of the desired glazing” in line 3. There is insufficient antecedent basis for the instant limitation in the claim.

Claim 12 recites the limitation “these same means” in lines 6-7 however the instant limitation again lacks antecedent basis in the claim.

Claim 12 recites the limitation of “the operation” in line 3. The instant limitation lacks antecedent basis in the claim.

Claim 12 sets forth the structure of the claimed bending frame according to an intended use of said frame. For example, the claim recites the limitation such that “in addition to the frame having for the purpose of the operation the profile of the desired glazing and said frame supporting one of the two sheets at the beginning of the bending process”. While there is nothing preventing Applicant from defining an apparatus according to its intended use *per se*, the instant claim language gives rise to substantial ambiguities concerning the range of structures encompassed by the claim language. That is, it is not entirely evident what range of structures would be encompassed under the present claim language. For at least this reason, the particular metes and bounds of the instant invention are rendered unclear and indefinite.

Claim 14 is construed as a product-by-process for the process as recited in claim 1. For reasons noted above the precise metes and bounds of the parent process claim are unclear and indefinite, and it therefore follows that the scope of the instant claim is likewise rendered as unclear and indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

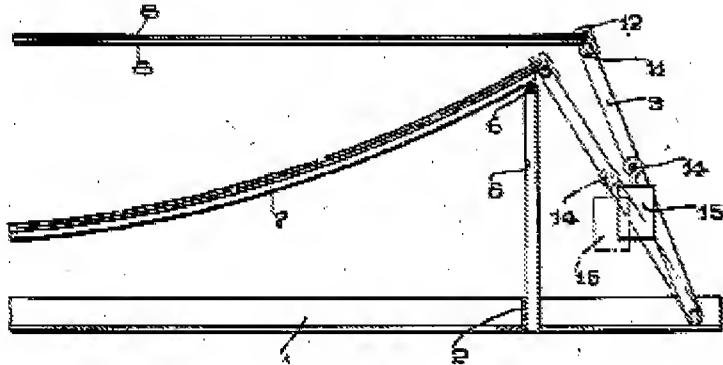
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Black (US 1,999,558).

With respect to claim 12 and with particular reference to the instant figure 5, Black teaches a gravity bending frame comprising a central frame (7) having the profile of a desired glazing and supporting elements (9) capable of supporting a sheet above the central frame and likewise capable of being moved away to release the upper sheet. That is, although Black does not explicitly teach the bending process as recited in Applicants claim 1, absent compelling evidence to the contrary, the disclosed bending frame appears to meet every limitation of the device as recited in the pending claims 12 and 13.

Fig. 5.



Applicant is further advised that the substantial deficiencies noted above with respect to claim 12 under 35 U.S.C. §112, second paragraph preclude an absolute determination of anticipation under 35 U.S.C. §102. That said, the bending device set forth by the Black reference appears to meet every structural limitation of the recited claim and further appears to be fully capable of operating in accordance with the process as recited in claim 1.

Claim 14 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tunker (US 5,443,669).

In the instant case, Claim 14 is drawn to a bent laminated glazing made the process set forth for the manufacture as outlined in Claim 1. As such, Claim 14 amounts to a product-by-process claim for the processes set forth in Claim 1.

Tunker teaches a bent laminated glass assembly having an enamel glazing between two outer glass sheets (col. 2, line 42 to col. 3, line 10, col. 4, lines 28-37) which appears to meet every structural limitation of the product formed in accordance with the process of claim 1.

In the event any differences can be shown for the product-by-process claim 14, as opposed to the product taught by the Tunker reference, such differences would have been obvious to one of ordinary skill in the art as routine modification of the product in the absence of a showing of unexpected results, see *In re Thorpe*, 227 USPQ 964 (CAFC 1985). As the afore mentioned claim is a product by process claim, it is deemed that “[A]ny difference imparted by the product by process claims would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art the burden of proof is shifted to the applicants to establish that their product is patentably distinct, ...” *In re Brown*, 173 USPQ 685, and *In re Fessmann*, 180 USPQ 324. Further, “[P]rocess limitations are significant only to the extent that they distinguish the claimed product over the prior art product.” *In re Luck*, 177 USPQ 523 (1973).

Allowable Subject Matter

Claims 1-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

No reference viewed singly or in combination teaches nor fairly suggests the recited invention of claim 1. Specifically, although a plurality of references teach the gravity bending paired glass sheets for the fabrication of a laminated glazing no

reference teaches the process of painting a glass sheet with pattern of enamel paint, arranging glass panes one atop the other upon a single bending frame such that a the painted surface is between the sheets and so that a space is maintained between the panes, increasing the temperature in a furnace to sinter the paint, and then directly contacting the sheets to complete the bending operation.

Applicant is advised that the United States Patent Publication (US 2007/0119536 A1) constitutes the closest related art, however due to the fact that the parent International Application was not published in English, said reference is not a valid prior art reference. Having acknowledged the foregoing, Matsuo teaches a nearly identical process to that set forth in Applicants claimed invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. LAZORCIK whose telephone number is (571)272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason L Lazorcik/
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